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## The Armament Research Development & Engineering Center



### Data-Driven Modeling of Human Behavior in Military Operations

Innovative Armaments Solutions for Today and Tomorrow

J. Riedener & E. Mezzacappa

Army's Target Behavioral Response Laboratory

**TBRL**

#### The TBRL Mission

We test **PEOPLE!**

We are looking for TACTICALLY RELEVANT results

We always endeavor to use what the Soldier wants as the primary metric

#### TBRL Capabilities

1. Indoor and outdoor testbeds configured and maintained for experimentation
2. Equipment, both hardware and software, required for operation, data collection and analysis
3. Safety and environmental procedures with approvals required to permit experimentation
4. ARDEC Institutional Review Board
5. Trained staff to Develop, Conduct and Report on Human Research
  - Credentialed research scientists serving as Principal Investigators
  - Mechanical, electrical and biomedical engineers
  - Human Research Technicians

Create models of human behavior in response to non-lethal weapons & Validate the models developed for simulations of human behavior

*"Lab to laptop" experimental data-based M&S of human behavior*

